PROSPECTUS

OF THE

Toronto Gold Mining

COMPANY.

1873

PROSPECTUS

OF THE

Toronto Gold Mining Company.

CAPITAL, - - - - $500,000,

IN SHARES OF $20 EACH.

INCORPORATED NOVEMBER, 1873.

DIRECTORS.

HUGH MACDONALD, of Toronto, . .	PRESIDENT.
JOHN BLACKLOCK, of Hastings, . .	VICE-PRESIDENT.
JAS. RIXON BARBER, . .	Cobourg, "
JOHN M. JONES, . . .	Hastings, "
JAMES SOUTHALL, . . .	Norwich, England,
JOHN MOSS, ...	Toronto, Ont.

SOLICITORS—MESSRS. BEATTY, CHADWICK & LASH.

BANKERS—THE BANK OF MONTREAL.

C. C. ROBB, Toronto, Secretary.

This Company has been formed for the purpose of working the extensive and valuable deposits of ore on lot six of the ninth concession of Marmora.

The accompanying letter from Professor Chapman, who is intimately acquainted with the locality and the valuable nature of its auriferous deposits, is the best guarantee of the commercial value of the property, and the large profits likely to accrue to the Company.

TORONTO, JULY 12TH, 1873.

GENTLEMEN,—

I have but just returned from an examination of some coal properties in Cape Breton, and I am under engagement to leave again for England in the course of a few days. It is not in my power, therefore, at present to make the proposed examination of your mineral property on lot six of the ninth concession of Marmora. I may state, however, from personal knowledge of the locality generally, that the main band of gold-bearing mispickel and quartz, commonly known as the Dean and Williams vein, passes entirely through the property in question in a general north and south direction, and that a considerable portion of the equally rich "Gillen Vein" also occurs upon it. There can be no doubt, therefore, of the presence on the ground of a large amount of auriferous ore, and I have no hesitation in expressing my conviction that if proper works be erected for the treatment of this ore, according to the process now being carried on at the Dean and Williams mine, immediately adjacent to your property, large returns should be obtained for the amount of capital proposed to be expended.

I am, Gentlemen,

Your obedient servant,

E. J. CHAPMAN,

Professor of Mineralogy and Geology in University College, Toronto, and Consulting Mining Engineer.

NOTE.—The following statement may serve to convey an idea of the large amount of gold that the lode upon your property may be fairly expected to yield per 100 feet in length and depth. The width of the lode may be assumed to average at least 5 feet, and the specific gravity of the ore (a mixture of auriferous mispickel and quartz), may be regarded as being equal to at least 4. A ton of 2,000 lbs. will thus contain about 7½ cubic feet, and 100 feet of the lode in length and depth will hold nearly 6,700 tons. When concentrated by proper dressing, this amount would probably be reduced to about 3,350 tons, from which, as shown by actual trials on several tons of similar ore at the Dean works, from $28 to $30 of gold per ton should be obtained, in addition to an amount of by-products, in the shape of paint materials, sufficient to defray the cost of treatment. Upwards of eighty-seven thousand dollars' worth of gold may thus be regarded as capable of extraction from each strip of the lode 100 feet in length and depth. The gold from these Marmora lodes, I should observe, contains very little silver, and presents, on coming out of the retort, a rich yellow color. It is equal in fineness to rather more than 22 carats, and is worth about $20 per oz. Troy.

E. J. C.

It will be seen from the foregoing letter that two valuable lodes of gold-bearing mispickel occur on the property, both of which are being worked — one by the Dean & Williams Company, and the other by the Gatling Company; the latter under a special

mining act obtained during the last session of the Provincial Legislature.

Since the foregoing letter from Prof. Chapman was written, three other veins have been discovered, and in two instances openings have been made with a view of testing their value. Two on the east side of the property are of the general character of the lodes being at present worked, and give indications of unusual richness. The other vein is more fully described on pages 7 and 8.

The Company's property embraces an area of fifty acres of what is acknowledged to be the most valuable part of the gold bearing belt of Marmora, and it is the intention of the Directors to erect a mill, costing not less than $50,000, capable of treating thirty tons of ore per day. The mill will be built on the most approved principle, embracing all the latest improvements to be found in the mills of California, where large profits are made in working ores very inferior to, but of the same character as those of Marmora. The Directors hope to have the mill ready for active work by May, 1874.

Two facts may here be mentioned, and being matters of record outside of, and entirely independent of the Company, will assist in establishing the soundness of the undertaking, and are the best and safest indications of the value of the property.

1st. The well known existence of these lodes of gold bearing mispickel, and their richness by assay.

2nd. Their practicably inexhaustible quantity so far as the operations of a mining company are concerned.

The following is the assay by Prof. Chapman of ore from the Dean and Williams vein, taken from a depth of 70 feet below the surface:

Gold—4 oz. 6 dwts. 8 grs.
Silver— 7 dwts. } equal to $89.18 per ton of 2000 lbs.

The following is the assay by Prof. Chapman of ore from the Gillen vein:

Gold—6 oz. 8 dwts.
Silver— 7 dwts. } equal to $133.20 per ton of 2000 lbs.

Assay by Dr. Harrington of the Government Geological survey, Montreal, accompanying report of Mr. H. G. Vennor, F.G.S.—(*See Progress Report for* 1872, *Geological Survey of Canada*):

Value per ton of 2000 lbs.....$86 53

This assay, it may be remarked, refers to the mispickel veins mentioned in Prof. Chapman's letter, since the writing of which

the vein of magnetic iron and mispickel referred to on pages 7 and 8 has been opened and tested.

The great hindrance hitherto to the extraction of the gold, from these valuable ores has arisen from the obstinate character of the arsenical combination, the component parts of the ore being iron, sulphur, and arsenic, the arsenic and sulphur being 65 % of the whole.

Scientific knowledge has at length been brought to bear upon their treatment, and the result has been the discovery of a process simple and inexpensive, which not only frees the gold, making its extraction by amalgamation no longer a matter of difficulty, but the whole of the ore is resolved into its simple elements, all of which have a large commercial value. The ore recently treated in large quantities under this process by the Dean & Williams Company, has yielded $30 worth of gold to the ton, although their machinery for the purpose is as yet only in a crude state, and this yield is expected to be largely increased. The other products under this process are large quantities of a valuable arsenical green paint material, known in commerce as Paris Green; also a valuable yellow arsenical orpiment, white arsenic, in large quantities, and the entire residuum, after these being extracted, is a mineral oxide of considerable value, being largely used in various branches of manufacture. This process was recently discovered by Professor Chapman, and is held by him, and two other gentlemen interested in this locality, under a patent, and the projectors have secured the right to use the process under the most favorable terms.

It may be noticed here that this process does not necessitate any outlay for skilled or scientific assistance, and the additional expense for machinery and accessories is comparatively nominal; and independent of the gold obtained, the resulting chemicals are likely to yield 50 per cent. profit upon the cost of treatment. This can be understood when it is shown that a large proportion of the 46 parts of the arsenical combination of this ore, and the entire residuum, become of commercial value.

An idea of the value of this property may be gained by computing the product of a small mill, and the result is so likely to appear incredible, that, were not the property easy of access, and the facts capable of verification by a visit to the mill now working

on the adjoining lot, the projectors would hesitate to publish them. A mill of only moderate size can easily treat fifteen tons of ore per day, which would give the result of a day's work as follows:

Gold, at $30 per ton,	$450
200 lbs per ton of Paris Green, at 10c.	300
10,000 lbs. Metallic Oxide, at $13 per ton,	65
Total,	$815

or a result, for 200 working days during the year, of $163,600, or for 300 working days during the year, of $244,000. It may be added, in explanation of the foregoing figures, that it is confidently expected that the yield of gold will reach $40 per ton; also, that from 250 to 300 lbs. of Paris Green per ton can be extracted, and that $13 per ton has been offered by a leading firm for the Metallic Oxides—not, of course, for all that may be produced, but for all their trade requires, which is quite a large quantity. In the above calculation the Paris Green has been put at 10c. per lb., whereas its present lowest wholesale price is 20c.; also no account has been taken of the white arsenic, of which large quantities are produced.

No charge has been made in the above calculations for chemicals and working expenses, which, for a period of 300 days, would, at a maximum rate, not exceed $60,000. The above has been merely given to convey some idea of the immense richness of these mispickel deposits, treated under this patent; but there can of course be no object in restricting the working to this limited quantity, the doubling, or trebling, of which is simply the employment of additional labor and machinery.

The foregoing relates exclusively to the mispickel ores referred to in Professor Chapman's letter, but since he visited the property an important discovery has been made upon it.

A vein of magnetic pyrites and black magnetic iron has been tested by several crushings in a neighboring mill, which have uniformly yielded gold to the value of over $35 to the ton. This ore is free from arsenic, and is treated simply by roasting and amalgamation, at one point an opening has been made to the depth of fifteen feet, and the vein is found to be of immense width, being

about forty-five feet from wall to wall, and from the surface indications it appears to extend in equal width across the whole property.

This is one of the largest deposits of gold bearing ore ever discovered, and will not only afford vast quantities of rich ore, but from its great width it can be taken out at a merely nominal cost; a circumstance of much importance in mining; if, indeed, from the width of the vein the workings may not be called quarrying rather than mining.

This vein alone would supply ore for several mills of large capacity, and, taken in connection with the other veins upon the land, makes this one of the most valuable mining properties on this continent, and when proper works are erected it cannot fail to yield large returns to the investors.

In conclusion, the projectors wish to be understood that this is no wild scheme, or chimerical project, having its base of operations in some inaccessible region, a thousand miles distant; neither has the capital been placed at enormous figures, for the purpose of disposing of it at a few cents on the dollar, and even at those rates, yielding a large sum to the promoters. The intention is to make this a sound and valuable property to the stockholders. The mine is of easy access, being reached by a pleasant drive from Belleville, over an excellent road, and every facility will be given to examine the property, and information furnished.

Further particulars and information may be had by addressing the Secretary,

C. C. ROBB,
Box 1554, Toronto P. O.

Dividends to Stockholders in Great Britain will be payable semi-annually, at the Bank of Montreal, London.